

Bugs, Bytes and Glitches

Information and Communications Technology Team US Department of Commerce Summer 2003

Export News from Africa and the MidEast

ALGERIA – Algeria's market for computers and peripherals is large. Only lack of financing hampers import growth since the largest end-users, government agencies and state-owned companies, generally request financing in their calls for tenders. Although U.S. manufacturers dominate this market, they can increase their market share through supplier credits. Their main competitors, French and German suppliers, draw on their governments' export credit guarantees to finance their sales. This is the only competitive advantage they enjoy. The most promising markets are for monitors, printers, microcomputers, and minicomputers.

Computers and Peripherals (CPT)	2000	2001	2002 (e)
Total market size	257	345	425
Total local production	12	15	20
Total exports	0	0	0
Total imports	245	330	405
Imports from the U.S.	115	155	190

Source: Country Commercial Guide. For more info: http://www.emich.edu/ict_usa/ALGERIA.htm

CONGO - For more info: http://www.emich.edu/ict_usa/CONGO.htm

COTE D'IVORIE - The fast development of Internet in Cote d'Ivoire has spurred a variety of

added value services including web page developing, dial up connections and Cyber cafes. As a result one can find a cyber café at any street corner in Abidjan.

The most appreciated services offered by the cyber café operators are IP telephony/fax. Unfortunately however, IP telephony/ fax is not yet permitted as international voice communication is still the monopoly of Cote d'Ivoire telecom (CI TELECOM), the former state owned telephony company now bought by France telecom. This monopoly is scheduled to end by February 2004 opening the sector to a free competition. For more info: http://www.emich.edu/ict_usa/COT'E_D_IVORIE.HTM

EGYPT - Dramatic changes have occurred in Egypt's telecommunications sector since the Telecommunications Law #153 of 1980 was replaced by Law 19 of 1998. The formation of Egypt's new Ministry of Communication and Information Technology (MCIT) in October 1999 also marked the beginning of a new era for Egypt's telecommunication and information technology sector characterized by a new regulatory framework and a more liberalized market. At present, there are nine telecom service providers licensed to do business in Egypt: Telecom Egypt, the government entity that operates the traditional fixed land line network, 2 GSM (mobile telephone) companies, 2 providers of payphone services, and 4 low earth orbital (LEO) satellite systems operators: VSAT Service, Anmar-Sat, Al-Soraya, and Global-Sat. Source: ISA -Telecommunications Equipment & Services. For more info: http://www.emich.edu/ict_usa/EGYPT.htm

GHANA – Telecommunications Equipment (TEL) - As a result of the government's liberalization of its telecommunications sector, annual growth has been significant. Imports are mainly for landline projects, private mobile telephone services, and broadband data transfer services. Major imports include switching and transmission equipment, telephone, and fax machines, radio and television equipment, and cellular radiotelephones.

The national network operators have programs underway to meet their performance targets under their licenses. The key competing countries are Denmark, Japan, Malaysia, France, and the U.K. Demand is expected to rise in 2002 as result of a government's new policy direction in allowing other investors into Ghana telecom for its expansion program. The above statistics are unofficial estimates. Source: Country Commercial Guide. For more info: http://www.emich.edu/ict_usa/GHANA.htm.

ISRAEL – The Broadband Fixed Wireless (BFW) market in Israel is under developed. The Ministry of Communications is expected to assign LMDS & WLL frequency bands to the operators by the end of 2003. They may also soon open the 5.8 Ghz band for BFW. This report provides answers to questions about the market in Israel, and highlights an interesting trade promotion/market entry opportunity organized by the U.S. Embassy's U.S. Commercial Service in Tel Aviv. Source: IMI - Q&A's on Israel's Broadband Fixed Wireless Market For more info: http://www.emich.edu/ict_usa/ISRAEL.HTM

KENYA – The Kenyan computer hardware and peripherals industry is relatively new and underdeveloped, yet it is the fastest growing market sector in Kenya. The industry is made up of imported products, mainly those from the United States of America, but there is also a sizeable percentage from European and Asian countries. Local companies are confined to the retail and maintenance end of the business. The U.S. is the major source of computers and peripherals used in Kenya, accounting for 76 percent of the market. Kenya imports 100 percent of its computers and peripherals, with very little assembly done locally.

Industry sources estimated the entire Kenyan computer and peripherals market at US\$40 million by the end of 1999, with an annual growth rate of 45 percent. With the millennium bug problem surmounted and the economic improvement expected this year, industry growth is expected to be even higher. According to statistics, Kenyan imports of hardware and peripherals fell to US\$14 million in 1999, representing a small decline from the US\$ 15 million recorded in the previous year. Statistics are somewhat unreliable, and the consensus among industry is that the purchases of computer equipment to combat the millennium bug were higher, however, the Kenyan government did impose temporary sanctions on the importation of computers.

The branded computers such as Compaq, IBM, Hewlett Packard, Apple and Dell have captured the biggest portion of the local market. The brands are, however, facing increasingly fierce competition from the clones market. Clones are machines that have no specific brand name as their components are sourced from different manufacturers and assembled locally or imported already assembled. Another significant market segment is the used computers market. Industry sources place the market share of the branded, clones and used computers at 45 percent, 35 percent and 20 percent of the total market respectively. Source: ISA - COMPUTER HARDWARE AND PERIPHERALS. For more info: http://www.emich.edu/ict_usa/KENYA.htm

KUWAIT - Information Technology (IT) -

Kuwait, with a population of 2.2 million, is the third largest information technology (IT) market in the Gulf Region, after Saudi Arabia and the UAE. The total market for IT for hardware and software in Kuwait is estimated at USD 90 million for 2000, with software programs representing 40 percent of sales. There are 80,000 Internet subscribers in Kuwait. However, this relatively low figure is deceptive, as multiple users for these subscriber accounts boost the overall Internet usage to over 250,000 individuals. The number of both subscribers and users is projected to increase at 10-15 percent per year.

In spite of the relatively high penetration rates of IT and Internet services in Kuwait, E-Commerce in Kuwait has not made significant inroads, and traditional patterns of retailing, wholesaling and government services persist. Reflecting this resistance to change, all forms of E-Commerce accounted for only USD 8 million in transactions in 2000. However, major private and public E-Commerce initiatives currently being implemented in Kuwait could lead to revolutionary changes in the way Kuwaitis do business and receive government services. Reflecting this change. E-Commerce transactions are expected to exceed USD15 million by 2003. The Kuwait market for E-Commerce related hardware, software and services for 2000 was estimated at USD13.5 million, and is expected to grow at 25 percent per year. This anticipated growth should lead to exceptional opportunities in Kuwait for American suppliers of virtually all types of IT hardware/software and E-Commerce services, especially those related to: Internet Service Provider (ISP) Services: Transaction Security Systems/Services: Networking & Communications Systems/Services; Outsourcing; and B2C/B2B/G2C Services.

Market acceptance of U.S. IT and E-Commerce products and services in Kuwait is very strong.

Kuwaitis are very well informed IT consumers and view American products as offering superior technology. However, European and Asian IT competitors are also active here, making Kuwait a very competitive and price sensitive market.

Information Technology	1999 (Actual)	2000 (Actual)	2001 (Estimated)
Total Market Size	90	99	110
Total Local Production	00	00	000
Total Exports	00	00	000
Total Imports	90	99	110
Total Imports from U.S.	22.5	24.8	27.5

USD Millions

Source: Country Commercial Guide. For more info: http://www.emich.edu/ict_usa/KUWAIT.htm

MAURITIUS – Source: For more info: http://www.emich.edu/ict_usa/MAURITIUS.HTM

MOROCCO - Morocco - Morocco is the second most computerized country in Africa, after South Africa, with a sector annual growth exceeding 15%, and a computer market estimated at \$315 million at the end of 1999. Experts predict that the rapid liberalization and expansion of the Moroccan IT sector will boost the Moroccan computer and peripheral sales up to 35-40% per year.

Computer networks and operations are widely introduced compared to other countries in the region. PC penetration remains however very low in comparison with developed countries. The latest official statistics (1998) estimated the penetration rate at 0.7%, with a total number of PCs of approximately 200,000 units. This is due to the low Moroccan purchasing power, which prohibits acquisition of computers with the capacity to perform a wide range of applications. Computer sales did however increase as a result of worldwide cheaper prices, the increase in the number of companies that assemble PCs locally, and of the decrease in the Moroccan customs duties (down from 42.5% in 1991 to 17.5% in 1996 and 2.5% in 2000). This resulted in increased imports (assembled PCs, laptops, hardware parts, RAMs, CDs, etc.), which grew from \$14 billion in 1999 to \$16.3 billion in 2000 and \$17 billion in 2001. The total number of PCs went up from 200,000 in 1998

to app. 500,000 in 2000, valued at \$144 million (1998) and \$180 million (2000). These figures indicate that the current penetration rate should be well above the 1998 figure of 0.7%. Source: ISA - <u>Information and Internet Services</u> For more info please see: http://www.emich.edu/ict_usa/MOROCCO.htm

NIGERIA - Telecommunications Equipment:

TEL - The two private operators of Nigeria's digital mobile telecommunications systems use the Global System for Mobile telecommunications (GSM). MTN Nigeria and Econet Wireless have surpassed, in less than 8 months, what Nigeria could not achieved in 40 years using the Nigerian Telecommunications Limited (NITEL) parastatal network. Between these two firms, over 900,000 mobile lines have been deployed in

(NITEL) parastatal network. Between these two firms, over 900,000 mobile lines have been deployed in various cities across the country and people are happily talking to one another 24 hours a day, 7 days a week. All evidence indicated that the future of telecommunications in Nigeria remains wireless. Factors responsible for this prediction include global trends in technology and equipment; the success of digital mobile services and fixed wireless options, Nigeria's topography and size, Nigeria's telecommunications policy directives and cost, and the Nigerian government national telecommunications commitment over the next 5–7 years.

Source: Country Commercial Guide. For further info: http://www.emich.edu/ict_usa/NIGERIA.htm

SAUDI ARABIA - Saudi Telecom

Company (STC)'s monopoly over Very Small Aperture Terminal (VSAT) services will end in 2003, as four VSAT licenses will be awarded this year. Saudi Arabia has a good market for VSAT service in broadband Internet connectivity. As wire-line DSL service is lagging behind due to technical limitations and population dispersion. VSAT could offer a viable alternative for companies and, even individuals, who wish to have access to high speed Internet in areas not covered by STC's DSL services. Source: IMI - Saudi Arabia VSAT Market

For more info:

http://www.emich.edu/ict_usa/SAUDI_ARABIA.htm

SOUTH AFRICA - E-Commerce Update

- South Africa's Internet economy is growing, despite the odds. Expensive and limited bandwidth and the rapid depreciation of the Rand have not slowed the take-up of technology or its business opportunities.

Online spending has increased but the number of Internet shoppers has not grown significantly, so several online retailers have closed down. There are some successful companies trading online in the

business-to-consumer space, but analysts say the opportunities are limited. BMI-TechKnowledge (local ITC Research company) predicts that for the next few years at least, SA companies will focus on electronic procurement before embarking on complex supply chain automation and integration.

Most online activity takes place in the business-tobusiness (B2B) environment and this is gaining pace. The larger South African firms trade with one another electronically and a few companies trade through dedicated portals/gateways or exchanges run by third parties.

B2B e-commerce will be driven by companies' need to maintain an electronic dialogue with clients and suppliers. The Internet has changed the way businesses perceive their channels, processes, and markets and customers will continue to exert its influence on the way business is done. Source: ISA - E-Commerce Update For more info: http://www.emich.edu/ict_usa/SOUTH_AFRICA.htm.

SYRIA – After a prolonged bidding process, the Syrian telecommunications establishment (Syria's PTT - STE) officially announced February 4 its decision to award the contract for provision of GSM telephone service to operating companies Syriatel and Investcom. Syriatel, a private consortium of local and foreign investors, and Investcom, a private Lebanese firm, have been providing GSM service in Syria on a trial basis for the past year. (Note: the largest single shareholder in Syriatel is Egyptian telecommunications firm Orascom.) In cooperation with telecommunications giants Eriksson and Siemens who provided the equipment for the trial, Syriatel and Investcom aim to establish two networks to eventually service 850,000 subscribers.

Subscription sign-up fees are expected to drop from the current price of 60,000 Syrian pounds to 20,000 Syrian pounds in April. The monthly fee is expected to be 600 Syrian pounds. Source: IMI - New GMS Providers. For more info: http://www.emich.edu/ict_usa/SYRIA.HTM.

UNITED ARAB EMIRATES -

COMPUTER AND NETWORK SECURITY - The market for computer security products in the U.A.E. is still a relatively nascent market. U.A.E. market demand for computer security products has evolved in the last few years from simple password and anti-virus software and products designed to physically protect computer equipment to complex systems of hardware and software to control access and use; and to protect data.

The market for computer related security products are expected to become a fast growing segment within the U.A.E. I.T. market. Local industry sources reason that factors that will play a role in this growth is the decentralization of the once centrally managed and relatively secure - mainframe to the current decentralized client/server environment and increased use of new technology. Technology such as data communication, communication via internet/intranet in business, telecommuting, electronic banking and payments (a small but growing market here) as well as a growing number of electronic commerce transactions. Market size for computer network security products is estimated at approximately US\$ 10.45 million for 2000. Industry sources expect this segment to increase by 10% in 2001 and should rise sharply by 30% in 2003.

It is estimated that an approximate 103,000 PCs were sold in the U.A.E. during 2000. Factors that grew this market were the Internet and e-business. The industry believes that at least 5-20% of these PCs will be used for applications that could potentially use encryption software. With the ever pervading and growing virus rampages, anti-virus software protection has become an almost necessity for all PCs. The growth in PC sales is due to the ever-growing numbers of Internet users. A local press article stated that the UAE tops the list for Internet users in the Arab world and is ranked 22 in the world for its percentage of Internet users in terms of the country's population. It was stated that it is averaged at three users per account for the 220,000 subscribers making the total number of users in the U.A.E. 660,000 persons, nearly 25% of the population. Internet users for the U.A.E. grew 57% in the past year. Source: ISA - Computer And Network Security. For more info:

http://www.emich.edu/ict_usa/UAE.htm.

TRADE EVENTS - There are literally hundreds of shows, conferences, etc annually. We suggest that you do a careful analysis of what's best for you. The Michigan District Export Council has published a handy guide to both identify and assess the best trade show. It's located at: http://www.exportmichigan.com/int'l trade show.html

INDUSTRY TRENDS - We've

moved! The ICT Team website has moved. Our new address is: http://www.emich.edu/ict_usa/.